Page 1

=> d 17 1-8 pi

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L7 ANSWER 1 OF 8 WPIDS COPYRIGHT 1996 DERWENT INFORMATION LTD PΙ WO 9607649 A1 960314 (9617) * EN 68 pp C07D265-32 RW: AT BE CH DE DK ES FR GB GR IE IT KE LU MC MW NL OA PT SD SE SZ UG W: AM AT AU BB BG BR BY CA CH CN CZ DE DK EE ES FI GB GE HU IS JP KE KG KP KR KZ LK LR LT LU LV MD MG MN MW MX NO NZ PL PT RO RU SD SE SG SI SK TJ TM TT UA UG US UZ VN AU 9533913 A 960327 (9627) C07D265-32 ANSWER 2 OF 8 WPIDS COPYRIGHT 1996 DERWENT INFORMATION LTD L7 ΡI WO 9605181 A1 960222 (9615) * EN 77 pp C07D265-32 RW: AT BE CH DE DK ES FR GB GR IE IT KE LU MC MW NL OA PT SD SE SZ UG W: AM AT AU BB BG BR BY CA CH CN CZ DE DK EE ES FI GB GE HU IS JP KE KG KP KR KZ LK LR LT LU LV MD MG MN MW MX NO NZ PL PT RO RU SD SE SG SI SK TJ TM TT UA UG US UZ VN AU 9531855 A 960307 (9624) C07D265-32 ZA 9506757 A 960529 (9628) 76 pp C07D000-00 ANSWER 3 OF 8 WPIDS COPYRIGHT 1996 DERWENT INFORMATION LTD L7 WO 9523798 A1 950908 (9601) * EN 322 pp C07D413-06 ΡI RW: AT BE CH DE DK ES FR GB GR IE IT KE LU MC MW NL OA PT SD SE SZ UG W: AM AU BB BG BR BY CA CN CZ EE FI GE HU JP KG KR KZ LK LR LT LV MD MG MN MX NO NZ PL RO RU SG SI SK TJ TT UA US UZ AU 9519750 A 950918 (9601) C07D413-06 ZA 9501780 A 951227 (9605) 325 pp C07D000-00 US 5512570 A 960430 (9623) 76 pp A61K031-535 ANSWER 4 OF 8 WPIDS COPYRIGHT 1996 DERWENT INFORMATION LTD L7PΙ WO 9530674 A1 951116 (9551)* EN 45 pp C07D413-06 RW: AT BE CH DE DK ES FR GB GR IE IT KE LU MC MW NL OA PT SD SE SZ UG W: AM AT AU BB BG BR BY CA CH CN CZ DE DK EE ES FI GB GE HU IS JP KE KG KP KR KZ LK LR LT LU LV MD MG MN MW MX NO NZ PL PT RO RU SD SE SG SI SK TJ TT UA UG US UZ VN AU 9523493 A 951129 (9609) C07D413-06 ANSWER 5 OF 8 WPIDS COPYRIGHT 1996 DERWENT INFORMATION LTD L7 US 5457107 A 951010 (9546)* 10 pp A61K031-535 PΙ GB 2293168 A 960320 (9615) 36 pp C07D413-06

ANSWER 6 OF 8 WPIDS COPYRIGHT 1996 DERWENT INFORMATION LTD

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WO 9518124 A1 950706: (9533) * EN 149 pp C07D413-06
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           RU SD SE SI SK TJ TT UA US UZ VN
    AU 9513223 A 950717 (9544)
                                               C07D413-06
    FI 9501762 A
                  951013 (9601)
                                               C07D413-06
    ZA 9410317 A 951129 (9601) 146 pp
                                               C07D000-00
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    ANSWER 7 OF 8 WPIDS
                         COPYRIGHT 1996 DERWENT INFORMATION LTD
    WO 9516679 A1 950622 (9530) * EN 320 pp C07D265-32
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    AU 9514375 A 950703 (9542)
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    ANSWER 8 OF 8
                  WPIDS COPYRIGHT 1996 DERWENT INFORMATION LTD
              A1 940105 (9402)* EN
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    EP 577394
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    AU 9341568 A 940106 (9408)
    CA 2099233 A
                  931230 (9411)
                                               C07D265-30
    AU 9346561 A 940124 (9420)
                                               C07D265-32
    JP 06172178 A 940621 (9429)
                                     75 pp
                                               A61K031-535
    ZA 9304624 A 940831 (9435) 231 pp
                                               C07D000-00
    FI 9406133 A 941228 (9512)
                                               C07D000-00
    NO 9405064 A 950228 (9518)
                                               C07D265-30
    CN 1087902 A 940615 (9531)
                                               C07D265-30
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- L6 ANSWER 1 OF 10 CAPLUS COPYRIGHT 1996 ACS
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- PY 1994
- L6 ANSWER 10 OF 10 CAPLUS COPYRIGHT 1996 ACS
- PY 1994
- => d 16 9-10 bib abs

L6 ANSWER 9 OF 10 CAPLUS COPYRIGHT 1996 ACS

AN 1995:252333 CAPLUS

DN 122:56044

TI Morpholine and thiomorpholine tachykinin receptor antagonists

IN Dorn, Conrad P.; Hale, Jeffrey J.; Maccoss, Malcolm; Mills, Sander
G.; Ladduwahetty, Tamara; Shah, Shrenik K.

PA Merck and Co., Inc., USA

SO Eur. Pat. Appl., 96 pp. CODEN: EPXXDW

PI EP 577394 A1 940105

DS R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE

AI EP 93-305086 930629

PRAI US 92-905976 920629

US 92-971448 921104

US 93-61914 930519

DT Patent

LA English

OS MARPAT 122:56044

GI

$$R^3$$
 X
 R^4
 R^2
 R^5
 R^5

Substituted heterocycles I [R1-R3 = H, substituted (e.g., substituted-Ph, -amino, heterocyclyl, etc.) or unsubstituted-C1-6 alkyl; R1 and R2 may join together to form a heterocyclic ring; R4 = substituted-phenylalkyloxy; R5 = Ph, substituted-Ph, substituted (substituted-Ph, -amino, etc.) or unsubstituted-C1-8 alkyl; X = O, S] were prepd, and are tachykinin receptor antagonists useful in the treatment of inflammatory diseases, pain or migraine, and asthma and calcium channel blockers useful in the treatment of cardiovascular conditions such as angina, hypertension or ischemia (no data). A representative prepd. example is (+/-)-2-(3,5-bis(trifluoromethyl)benzyloxy)-3-phenylmorpholine.

L6 ANSWER 10 OF 10 CAPLUS COPYRIGHT 1996 ACS

AN 1995:63847 CAPLUS

DN 122:55968

- TI Morpholine-based substance P antagonists: assessment of the 3-point binding model
- AU Ladduwahetty, T.; Keown, L.; Cascieri, M. A.; Sadowski, S.
- CS Neurosci. Res. Cent., Merck Sharp and Dohme Res. Lab., Harlow/Essex, CM20 2QR, UK
- SO Bioorg. Med. Chem. Lett. (1994), 16(4) (1917-20) CODEN: BMCLE8; ISSN: 0960-894X

Ι

- DT Journal
- LA English
- GΙ

- AB The carbon-linked morpholine analogs, e.g. I, of the Substance P antagonist CP-99,994 were synthesized. The activities of the resulting compds. suggest that there is a specific interaction between the benzylic heteroatom of these antagonists and the NK1 receptor.
- => d 16 10 hitstr
- L6 ANSWER 10 OF 10 CAPLUS COPYRIGHT 1996 ACS
- IT 159924-18-2P 159924-20-6P

RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation) (prepn. of morpholine-based substance P antagonists)

- RN 159924-18-2 CAPLUS
- CN Morpholine, 2-[2-[3,5-bis(trifluoromethyl)phenyl]ethyl]-3-phenyl-, cis-(.+-.)- (9CI) (CA INDEX NAME)

Racemate. One enantiomer shown.

RN 159924-20-6 CAPLUS

CN Morpholine, 2-[2-[3,5-bis(trifluoromethyl)phenyl]ethyl]-3-phenyl-, trans-(.+-.)- (9CI) (CA INDEX NAME)

Racemate. One enantiomer shown.

=> d 16 1-9 cbib

L6 ANSWER 1 OF 10 CAPLUS COPYRIGHT 1996 ACS

1996:428441 Document No. 125:114657 Preparation of arylorpholine derivatives as tachykinin antagonists.. Finke, Paul; Harrison, Timothy; Lewis, Richard Thomas; Macleod, Angus Murray; Owens, Andrew Pate (Merck Sharp & Dohme Limited, UK). PCT Int. Appl. WO 9607649 A1 960314, 66 pp. DESIGNATED STATES: W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LU, LV, MD, MG, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TT; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, DE, DK, ES, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG. (English). CODEN: PIXXD2. APPLICATION: WO

95-GB2039 950830. PRIORITY: GB 94-17956 940902.

- L6 ANSWER 2 OF 10 CAPLUS COPYRIGHT 1996 ACS

 1996:404626 Document No. 125:86654 Preparation of N(aminobutynyl)morpholines as tachykinin antagonists. Harrison,
 Timothy; Owens, Andrew Pate; Swain, Christopher John (Merck Shapr
 and Dohme Limited, UK; Swain, Christopher, John). PCT Int. Appl. WO
 9605181 A1 960222, 78 pp. DESIGNATED STATES: W: AM, AT, AU, BB,
 BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP,
 KE, KG, KP, KR, KZ, LK, LR, LT, LU, LV, MD, MG, MN, MW, MX, NO, NZ,
 PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TT; RW: AT, BE, BF, BJ,
 CF, CG, CH, CI, CM, DE, DK, ES, FR, GA, GB, GR, IE, IT, LU, MC, ML,
 MR, NE, NL, PT, SE, SN, TD, TG. (English). CODEN: PIXXD2.
 APPLICATION: WO 95-GB1868 950807. PRIORITY: GB 94-16427 940815; GB
 95-9605 950511.
- L6 ANSWER 3 OF 10 CAPLUS COPYRIGHT 1996 ACS

 1996:202936 Document No. 124:278532 2(S)-((3,5-Bis(trifluoromethyl)benzyl)oxy)-3(S)-phenyl-4-((3-oxo-1,2,4-triazol-5-yl)methyl)morpholine): A Potent, Orally Active, Morpholine-Based Human Neurokinin-1 Receptor Antagonist. Hale, Jeffrey J.; Mills, Sander G.; MacCoss, Malcolm; Shah, Shrenik K.; Qi, Hongbo; Mathre, David J.; Cascieri, Margaret A.; Sadowski, Sharon; Strader, Catherine D.; et al. (Merck Research Laboratories, Rahway, NJ, 07065, USA). J. Med. Chem., 39(9), 1760-2 (English) 1996. CODEN: JMCMAR. ISSN: 0022-2623. OTHER SOURCES: CJACS-IMAGE; CJACS.
- L6 ANSWER 4 OF 10 CAPLUS COPYRIGHT 1996 ACS
 1996:155505 Document No. 124:202285 Morpholine derivatives and their
 use as antagonists of tachykinins. Haworth, Karen Elizabeth; Teall,
 Martin Richard; Seward, Eileen Mary; Swain, Christopher John (Merck
 Sharp and Dohme Ltd., UK). PCT Int. Appl. WO 9530674 A1 951116, 44
 pp. DESIGNATED STATES: W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN,
 CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK,
 LR, LT, LU, LV, MD, MG, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE,
 SG, SI, SK, TJ, TT, UA; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, DE,
 DK, ES, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN,
 TD, TG. (English). CODEN: PIXXD2. APPLICATION: WO 95-GB983
 950501. PRIORITY: GB 94-8960 940505; GB 94-8963 940505.
- L6 ANSWER 5 OF 10 CAPLUS COPYRIGHT 1996 ACS

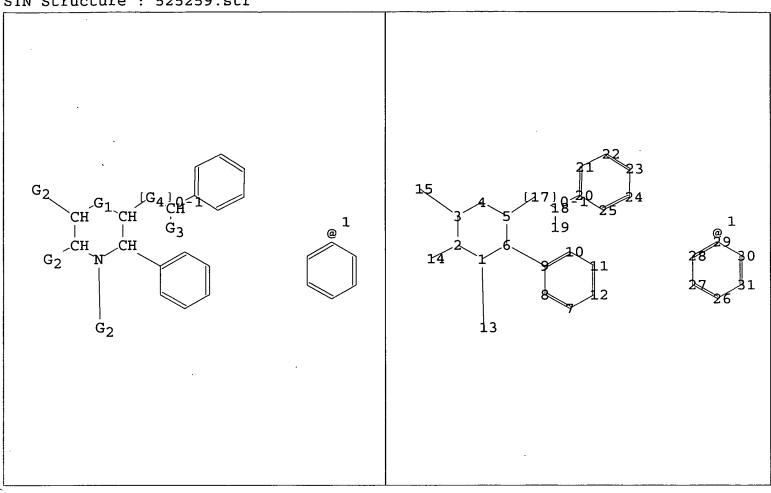
 1995:994556 Document No. 124:146177 Preparation of morpholine
 tachykinin receptor antagonist prodrugs. Dorn, Conrad P.; Hale,
 Jeffrey J.; MacCoss, Malcolm; Mills, Sander G. (Merck and Co., Inc.,
 USA). PCT Int. Appl. WO 9523798 A1 950908, 325 pp. DESIGNATED

STATES: W: AM, AU, BB, BG, BR, BY, CA, CN, CZ, EE, FI, GE, HU, JP, KG, KR, KZ, LK, LR, LT, LV, MD, MG, MN, MX, NO, NZ, PL, RO, RU, SG, SI, SK, TJ, TT, UA, US, UZ; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, DE, DK, ES, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG. (English). CODEN: PIXXD2. APPLICATION: WO 95-US2551 950228. PRIORITY: US 94-206771 940304.

- L6 ANSWER 6 OF 10 CAPLUS COPYRIGHT 1996 ACS
- 1995:969422 Document No. 124:29770 Preparation of arylmorpholine derivatives as tachykinin antagonists.. Baker, Raymond; Harrison, Timothy; Macleod, Angus Murray; Owens, Andrew Pate; Seward, Eileen Mary; Swain, Christopher John; Teall, Martin Richard (Merck Sharp and Dohme Ltd., UK). PCT Int. Appl. WO 9518124 A1 950706, 148 pp. DESIGNATED STATES: W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LU, LV, MD, MG, MN, MW, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SI, SK, TJ, TT, UA, US, UZ; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, DE, DK, ES, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG. (English). CODEN: PIXXD2. APPLICATION: WO 94-GB2819 941223. PRIORITY: GB 93-26480 931229; GB 94-7189 940412; GB 94-8065 940422; GB 94-16428 940815.
- L6 ANSWER 7 OF 10 CAPLUS COPYRIGHT 1996 ACS
- 1995:943459 Document No. 124:29769 Preparation of (thio)morpholines as tachykinin receptor antagonists. Dorn, Conrad P.; Finke, Paul E.; Hale, Jeffrey J.; MacCoss, Malcolm; Mills, Sander G.; Shah, Shrenik K.; Chambers, Mark Stuart; Harrison, Timothy; Ladduwahetty, Tamara; Williams, Brian John (Merck and Co., Inc., USA). PCT Int. Appl. WO 9516679 A1 950622, 319 pp. DESIGNATED STATES: W: AM, AU, BB, BG, BR, BY, CA, CN, CZ, EE, FI, GE, HU, JP, KG, KR, KZ, LK, LR, LT, LV, MD, MG, MN, NO, NZ, PL, RO, RU, SI, SK, TJ, TT, UA, US, UZ; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, DE, DK, ES, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG. (English). CODEN: PIXXD2. APPLICATION: WO 94-US14497 941213. PRIORITY: US 93-169889 931217.
- L6 ANSWER 8 OF 10 CAPLUS COPYRIGHT 1996 ACS
 - 1995:913755 Document No. 124:117332 Polymorphic form of 2-(S)-[3,5-bis(trifluoromethyl)benzyloxy]-4-[3-(5-oxo-1H,4H-1,2,4-triazolo)methyl]-3-(S)-phenylmorpholine, a tachykinin receptor antagonist. Kaufman, Michael J. (Merck and Co., Inc., USA). U.S. US 5457107 A 951010, 10 pp. (English). CODEN: USXXAM. APPLICATION: US 94-307962 940916.
 - L6 ANSWER 9 OF 10 CAPLUS COPYRIGHT 1996 ACS

1995:252333 Document No. 122:56044 Morpholine and thiomorpholine tachykinin receptor antagonists. Dorn, Conrad P.; Hale, Jeffrey J.; Maccoss, Malcolm; Mills, Sander G.; Ladduwahetty, Tamara; Shah, Shrenik K. (Merck and Co., Inc., USA). Eur. Pat. Appl. EP 577394 Al 940105, 96 pp. DESIGNATED STATES: R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE. (English). CODEN: EPXXDW. APPLICATION: EP 93-305086 930629. PRIORITY: US 92-905976 920629; US 92-971448 921104; US 93-61914 930519.

STN Structure : 525259.str



chain nodes :

13 14 15 17 18 19

ring nodes :

2 3 4 6 7 8 9 10 11 12 20 21 22 23 24 25 5 26 27 28

29 30 31

chain bonds :

1-13 2-14 3-15 5-17 6-9 17-18 18-19 18-20

ring bonds :

1-2 1-6 2-3 3-4 4-5 5-6 7-8 7-12 8-9 9-10 10-11 11-12 20-21

20-25 21-22 22-23 23-24 24-25 26-27 26-31 27-28 28-29 29-30

30-31

exact/norm bonds :

1-2 1-6 1-13 2-3 2-14 3-4 3-15 4-5 5-6 5-17 6-9 17-18 18-19

18-20

normalized bonds :

7-8 7-12 8-9 9-10 10-11 11-12 20-21 20-25 21-22 22-23 23-24

24-25 26-27 26-31 27-28 28-29 29-30 30-31

isolated ring systems :

containing 1 :

G2 H, Ak, [*1]

G3 Me, Et, n-Pr, i-Pr, n-Bu, i-Bu, s-Bu, t-Bu, H

G4 C,O,S

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:Atom 12:Atom 13:Class 14:Class 15:Class 17:Class 18:Class 19:Class 20:Atom 21:Atom 22:Atom 23:Atom 24:Atom 25:Atom

26:Atom 27:Atom 28:Atom 29:Atom 30:Atom 31:Atom